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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/993,536      | 11/14/2001  | Thomas B. Kinney     | 206214              | 8676             |

23460 7590 06/30/2005

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EXAMINER

DUONG, THOMAS

ART UNIT PAPER NUMBER

2145

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/993,536

Applicant(s)

KINNEY ET AL.

Examiner

Thomas Duong

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/25/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. (US006732191B1) and in view of Gretta, Jr. (US005850523A).
3. With regard to claims 1, 12, 19, 21, and 25, Baker discloses,
  - *invoking execution of a browser on the remote host node;* (Baker, col.2, lines 3-19; col.2, line 64 – col.3, line 34; col.4, line 51 – col.5, line 17)

*Baker teaches using "Web interface [to provide] access to the input/output device backplane by a user at a remote location through the Internet. The interface translates the industry standard Ethernet, TCP/IP and HTTP protocols used on the Internet into data recognizable to the input/output device. Using this interface, the user can retrieve all pertinent data regarding the operation of the input/output device, including input/output device configuration, input/output status, operating statistics, diagnostics, and distributed input/output configurations" (Baker, col.3, lines 17-27). According to Baker, "it would be desirable to develop an automation control system whereby a user could use*

*general purpose networks, such as the Internet and specialized industrial networks, [to provide direct connection] to input/output devices for remote monitoring and control of input/output modules or devices” (Baker, col.2, lines 55-59). Hence, Baker teaches the use of commercially available programming languages such as JAVA applets/servlets to provide connections to devices for maintenance, repair, debugging and diagnosing problems.*

- *loading a web page via the browser, the web page containing an applet identifier; (Baker, col.2, lines 3-19; col.2, line 64 – col.3, line 34; col.4, line 51 – col.5, line 17)*

*Baker teaches using “Web interface [to provide] access to the input/output device backplane by a user at a remote location through the Internet. The interface translates the industry standard Ethernet, TCP/IP and HTTP protocols used on the Internet into data recognizable to the input/output device. Using this interface, the user can retrieve all pertinent data regarding the operation of the input/output device, including input/output device configuration, input/output status, operating statistics, diagnostics, and distributed input/output configurations” (Baker, col.3, lines 17-27). According to Baker, “it would be desirable to develop an automation control system whereby a user could use general purpose networks, such as the Internet and specialized industrial networks, [to provide direct connection] to input/output devices for remote monitoring and control of input/output modules or devices” (Baker, col.2, lines 55-59). Hence, Baker teaches the use of commercially available programming languages such as JAVA applets/servlets to provide connections to devices for maintenance, repair, debugging and diagnosing problems.*

- *executing on the remote host node an applet corresponding to the applet identifier, wherein the applet is adapted when executed to establish communication between the remote host node and the local host node via the wide area network; (Baker, col.2, lines 3-19; col.2, line 64 – col.3, line 34; col.4, line 51 – col.5, line 17)*

Baker teaches using “Web interface [to provide] access to the input/output device backplane by a user at a remote location through the Internet. The interface translates the industry standard Ethernet, TCP/IP and HTTP protocols used on the Internet into data recognizable to the input/output device. Using this interface, the user can retrieve all pertinent data regarding the operation of the input/output device, including input/output device configuration, input/output status, operating statistics, diagnostics, and distributed input/output configurations” (Baker, col.3, lines 17-27). According to Baker, “it would be desirable to develop an automation control system whereby a user could use general purpose networks, such as the Internet and specialized industrial networks, [to provide direct connection] to input/output devices for remote monitoring and control of input/output modules or devices” (Baker, col.2, lines 55-59). Hence, Baker teaches the use of commercially available programming languages such as JAVA applets/servlets to provide connections to devices for maintenance, repair, debugging and diagnosing problems.

- *conveying information representative of the process data to the remote user of the remote host node via the browser. (Baker, col.8, lines 4 – 50; col.8, line 64 – col.9, line 8)*

Baker teaches of *"different request types allow a user to acquire a snapshot of the I/O device 40 operations by allowing a view of various data within the I/O device 40 ... including display of the I/O device 40 configuration, remote and distributed I/O and module health statistics"* (Baker, col.8, lines 15–20). Hence, Baker teaches of displaying requested information from the device to the remote user via the browser interface.

However, Baker does not explicitly disclose,

- *transmitting at least one signal from the remote host node to the local host node, wherein the at least one signal is constructed to cause the local host node to invoke execution of a servlet on the local host node, and further to cause the servlet to receive process data via a Foundation Fieldbus communication stack Fieldbus Messaging Specification layer from at least one of the plurality of process devices and to transmit the received process data to the remote host node via the wide area network and the applet; and*

Gretta teaches,

- *transmitting at least one signal from the remote host node to the local host node, wherein the at least one signal is constructed to cause the local host node to invoke execution of a servlet on the local host node, and further to cause the servlet to receive process data via a Foundation Fieldbus communication stack Fieldbus Messaging Specification layer from at least one of the plurality of process devices and to transmit the received process data to the remote host node via the wide area network and the applet; and* (Gretta, col.1, line 17 – col.2, line 41; col.3, line 50 – col.4, line 51)

Gretta teaches of monitoring a specific type of network called *"a fieldbus network [which] comprises a plurality of digital devices and control/monitoring equipment that are integrated to provide I/O and control for automated processes"* (Gretta, col1, lines 19-22). According to Gretta, *"communications between application processes in the field devices occurs through the application layer protocols, ... [which] is divided into two sublayers, an upper sublayer, defined by the Fieldbus Messaging Specification (FMS), that provides services to application processes, and a lower sublayer, known as the Fieldbus Access Sublayer (FAS), that maps FMS services onto the underlying capabilities of the data link layer"* (Gretta, col.1, lines 59-65). Hence, according to Gretta, it is known in the art to use the Fieldbus communication stack, which includes the Fieldbus Messaging Specification and Fieldbus Access Sublayer, to provide communications between the fieldbus devices and the applications.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Gretta with the teachings of Baker to develop a system whereby a user could use general purpose networks, such as the Internet and specialized industrial networks (i.e. fieldbus networks) to connect devices to remote monitoring and controlling.

4. With regard to claims 2-3, 13-15, 20, 22, and 24, Baker discloses,

- *wherein the wide area network is the Internet.* (Baker, col.2, lines 3-19; col.2, line 64 – col.3, line 34; col.4, line 51 – col.5, line 17)
- *wherein the servlet is a Java servlet and the Applet is a Java applet.* (Baker, col.2, lines 3-19; col.2, line 64 – col.3, line 34; col.4, line 51 – col.5, line 17)

5. With regard to claims 4-5, 16-17, and 23, Baker discloses,
  - *wherein the step of conveying information representative of the process data to the remote user comprises the step of displaying process data from two of the plurality of process devices. (Baker, col.2, lines 3-19; col.2, line 64 – col.3, line 34; col.4, line 51 – col.5, line 17)*
  - *wherein the process data is selected from the group consisting of device information, device status information, and a process parameter. (Baker, col.2, lines 3-19; col.2, line 64 – col.3, line 34; col.4, line 51 – col.5, line 17)*
6. With regard to claims 6-8 and 18, Baker and Gretta disclose,
  - *further comprising the step of inspecting a time stamp at the applet, wherein the time stamp is associated with the transmitted process data, to determine whether the transmitted process data is timely. (Baker, col.7, lines 16-59; Gretta, col.6, lines 25-61)*
7. With regard to claims 9-11 Baker discloses,
  - *wherein the process data is associated with hyperlink data specifying a second web page, the method further comprising the steps of:*
    - *reading the hyperlink data by the browser; (Baker, col.8, lines 4 – 50; col.8, line 64 – col.9, line 8)*
    - *accessing by the browser the second web page; and (Baker, col.8, lines 4 – 50; col.8, line 64 – col.9, line 8)*



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- *conveying by the browser to the remote user information corresponding to the second web page. (Baker, col.8, lines 4 – 50; col.8, line 64 – col.9, line 8)*
  - *wherein the second web page contains maintenance information regarding one of the plurality of process devices. (Baker, col.8, lines 4 – 50; col.8, line 64 – col.9, line 8)*
  - *wherein the step of conveying information representative of the process data to the remote user comprises the step of causing an audible indication to be directed to the remote user. (Baker, col.8, lines 4 – 50; col.8, line 64 – col.9, line 8)*
8. With regard to claims 26-29, Gretta discloses,
- *wherein the information transmitted by the servlet to the at least one process device comprises mode information to effect a mode change in the at least one process device. (Gretta, col.1, line 17 – col.2, line 41; col.3, line 50 – col.4, line 51)*
  - *wherein the information transmitted by the servlet to the at least one process device comprises program information to effect loading of an executable program onto the at least one process device. (Gretta, col.1, line 17 – col.2, line 41; col.3, line 50 – col.4, line 51)*
  - *wherein the information transmitted by the servlet to the at least one process device further comprises a command to invoke execution of an executable program. (Gretta, col.1, line 17 – col.2, line 41; col.3, line 50 – col.4, line 51)*

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- *wherein the information transmitted by the servlet to the at least one process device comprises a request for the at least one process device to send data to the servlet.* (Gretta, col.1, line 17 – col.2, line 41; col.3, line 50 – col.4, line 51)

**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571/272-6159. The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9306 for regular communications and 703/872-9306 for After Final communications.

*Thomas Duong (AU2145)*

*June 24, 2005*

  
VALENCIA MARTIN-WALLACE  
SUPERVISORY PATENT EXAMINER